



THERMOCOUPLE EXTENSION CABLE

Overall Shield
FEP Insulated 400°F (200°C)

Applications

- Petrochemical Plants
- Utilities and Industrial Plants
- Pharmaceutical Industry
- Thermocouple Circuits
- Food Processing Plants
- Agricultural Industry
- FDA Approved Applications
- Suitable for 300 Volt Applications

Product Features

- Continuous Use -328F (-200C) ...to +400F (+200C)
- Excellent Chemical Resistance
- Excellent Electrical Properties
- Passes IEEE 383 Flame Test
- Passes VW-1 Flame Test
- Sunlight Resistant
- UL Listed CL2, CL3, PLTC or ITC
- ...Constructions are Also Available

Product Specifications

Conductors:	Solid or stranded thermocouple extension wire per ASTM E230 & ANSI MC96.1 10 to 30 AWG (2.6 to .25MM)
Insulation:	Nominal .010" (.25MM) flame retardant extruded fluoropolymer FEP
Color Code:	Per ASTM E230 & ANSI MC96.1
Construction:	Twisted pairs
Pair Identification:	Numbered polyester tapes
Communication Wire:	22 AWG (.61MM) 7-strand copper insulated with nominal .010" (.25MM) orange FEP (4 pair and larger)
Cable Shield:	.002" (.05MM) aluminum/polyester tape, 25% overlap
Cable Drain Wire:	20 AWG (.91MM) 7-strand tinned copper
Outer Jacket:	Flame retardant extruded fluoropolymer FEP (ETFE +300F (+150C) and PFA +500F (+260C) are also available)



Ordering Code

TEX/ALTEXTWK - () - () () - ()

of Pairs Wire Size AWG or Metric Add (F) for Stranded Wire Calibration Grade Designation Per Table 1

Wire Size	Numbers of Pairs	Outer Jacket Thickness		Outer Diameter		Bend Radius		Pull Tension		Net Weight	
		inches	(MM)	inches	(MM)	inches	(MM)	LB	KG	LB/MF	KG/KM
16 AWG (1.29MM) Solid	1	.015	(0.38)	.188	(4.8)	1.1	(29)	54	(25)	34	(51)
	2	.020	(0.51)	.337	(8.6)	2.0	(51)	90	(41)	68	(101)
	4	.020	(0.51)	.396	(10.1)	2.4	(60)	172	(78)	118	(176)
	8	.025	(0.64)	.531	(13.5)	3.2	(81)	336	(153)	218	(324)
	12	.025	(0.64)	.634	(16.1)	3.8	(97)	500	(227)	315	(469)
	16	.030	(0.76)	.719	(18.3)	4.3	(110)	664	(302)	485	(722)
	24	.030	(0.76)	.875	(22.2)	5.3	(133)	992	(451)	595	(885)
	36	.030	(0.76)	.983	(25.0)	5.9	(150)	1484	(675)	860	(1280)

18 AWG (1.02MM) Solid	1	.015	(0.38)	.166	(4.2)	1.0	(25)	34	(15)	25	(37)
	2	.020	(0.51)	.295	(7.5)	1.8	(45)	60	(28)	50	(74)
	4	.020	(0.51)	.346	(8.8)	2.1	(53)	112	(51)	83	(124)
	8	.020	(0.51)	.452	(11.5)	2.7	(69)	216	(98)	143	(213)
	12	.025	(0.64)	.550	(14.0)	3.3	(84)	424	(193)	211	(314)
	16	.025	(0.64)	.614	(15.6)	3.7	(94)	528	(240)	272	(405)
	24	.030	(0.76)	.756	(19.2)	4.5	(115)	632	(287)	400	(595)
	36	.030	(0.76)	.848	(21.5)	5.1	(129)	944	(429)	572	(851)
20 AWG (0.81MM) Solid	1	.015	(0.38)	.150	(3.8)	0.9	(23)	21	(10)	17	(25)
	2	.020	(0.51)	.265	(6.7)	1.7	(40)	40	(18)	35	(52)
	4	.020	(0.51)	.319	(8.1)	1.9	(49)	72	(33)	63	(94)
	8	.020	(0.51)	.412	(10.5)	2.5	(63)	136	(62)	102	(152)
	12	.020	(0.51)	.488	(12.4)	2.9	(74)	200	(91)	155	(231)
	16	.025	(0.64)	.544	(13.8)	3.3	(83)	264	(120)	195	(290)
	24	.030	(0.76)	.670	(17.0)	4.0	(102)	392	(178)	275	(409)
	36	.030	(0.76)	.750	(19.1)	4.5	(114)	584	(265)	405	(603)

The products referenced above represent the most popular constructions. Other constructions can be manufactured to meet individual specification and application requirements. Contact factory for additional information.

Table 1

Initial Calibration Tolerances Per ASTM E230 and ANSI MC96.1

Tolerance-Reference Junction 32F (0C)

<u>Thermocouple Type</u>	<u>Temperature Range F(C)</u>	<u>Grade Designation</u>	<u>Standard Grade Limits F(C)</u>	<u>Grade Designation</u>	<u>Special Grade Limits F(C)</u>
<u>Extension Wire</u>					
TX	32 (0) to 212 (100)	TX	±1.8 (1)	TTX	±0.9 (0.5)
JX	32 (0) to 400 (200)	JX	±4 (2.2)	JJX	±2 (1.1)
EX	32 (0) to 400 (200)	EX	±3.1 (1.7)	EEX	±1.8 (1)
KX or NX	32 (0) to 400 (200)	KX or NX	±4 (2.2)	KKX or NNX	±2 (1.1)

Compensating Extension Wire

RX or SX	32 (0) to 400 (200)	RX or SX	±9 (5)
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Electrical Characteristics

Insulation passes 3000 V ac spark test.

Completed cable passes a dielectric test of 1300 V dc for

60 seconds, conductor to conductor and conductor to shield.